AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q87956

Application No.: 10/534,531

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): A silicon carbide sintered body, wherein

a[[the]]porosity obtained from areas of silicon carbide particles and silicon particles in a

sectional polished surface of the silicon carbide sintered body is greater than 15% and less than

30%, when the porosity (%) equals (the area of silicon particles/(the area of silicon particles +

the area of silicon carbide particles)) x 100; [[and]]

a content of residual silicon is less than 4% to a total volume of the silicon carbide sintered

body;

a bending strength is greater than 200 Mpa; and

silicone particles are uniformly dispersed as shown in Fig. 1.

2. (original): The silicon carbide sintered body according to claim 1, wherein

a total content of impurity elements other than silicon and carbon in the silicon carbide

sintered body is less than 10 ppm.

3. (previously presented): The silicon carbide sintered body according to claim 1,

wherein a content of nitrogen is greater than 150 ppm.

2

AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q87956

Application No.: 10/534,531

4. (withdrawn): A manufacturing method of a silicon carbide sintered body that uses a reaction sintering method, comprising

dispersing silicon carbide powder in a solvent, followed by pouring an obtained slurrylike powder mixture in a mold, further followed by drying to obtain a green body,

calcining the obtained green body under a vacuum atmosphere or an inert gas atmosphere at a temperature in the range of 1200°C to 1800°C to obtain a calcined body 1,

impregnating the obtained calcined body 1 with a carbon source,

calcining a calcined body 2 impregnated with a carbon source,

reaction sintering where the obtained calcined body 2 is impregnated with molten metallic silicon and free carbon in the calcined body 2 and silicon are reacted to obtain a silicon carbide body, and

heating in a vacuum atmosphere at a temperature in the range of 1450°C to 1700°C for 30 to 90 minutes to remove unreacted silicon.

- 5. (canceled).
- 6. (canceled).
- 7. (previously presented): The silicon carbide sintered body according to claim 1, wherein the porosity is greater than 15% and less than 20%.

AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q87956

Application No.: 10/534,531

8. (withdrawn): The manufacturing method of a silicon carbide sintered body according to claim 4, wherein in the heating to remove unreacted silicon a temperature is kept in the range of 1600°C to 1700°C for 50 to 70 minutes to remove the unreacted silicon.

- 9. (withdrawn): The manufacturing method of a silicon carbide sintered body according to claim 4, wherein the obtained silicon carbide sintered body has the bending strength of greater than 200 MPa.
- 10. (withdrawn): The manufacturing method of a silicon carbide sintered body according to claim 4, wherein the obtained silicon carbide sintered body has a structure where silicon particles are uniformly dispersed.
- 11. (withdrawn): The manufacturing method of a silicon carbide sintered body according to claim 4, wherein the obtained silicon carbide sintered body has the porosity of greater than 15% and less than 20%.